

Application No.: 09/691,352

Case No.: 55126US002

I. Amendments to the Claims

1. (original) An integrated granule product comprising a film having a plurality of ceramic coated granules bonded to said film by a cured adhesive.
2. (original) The product of claim 1, wherein said product is pliable as determined by mandrel flexibility test procedures according to ASTM D-228-00.
3. (original) The product of claim 1, wherein said film is a polymeric material.
4. (original) The product of claim 1, wherein said cured adhesive is cured through the use of ultraviolet radiation, thermal radiation, actinic radiation, ionizing radiation, moisture activation, photo activation, or combinations thereof
5. (original) The product of claim 1, wherein said cured adhesive is flexible as indicated by a tensile elongation result of 25% or greater according to ASTM D-882.97.
6. (previously presented) The product of claim 1, wherein said adhesive is selected from acrylated urethanes, multifunctional acrylate monomers, acrylated epoxies, acrylated polyesters, acrylated polyethers, urethanes, epoxies, acrylics, phenolics, cyanate esters, bismaleimides, hot melts of polyester, polyamides, polyolefins, derivatized polyolefins or combinations thereof
7. (original) The product of claim 1, wherein said adhesive is an acrylated aliphatic urethane.
8. (original) The product of claim 1, wherein said cured adhesive does not adversely affect an aesthetic color of said ceramic coated granules as indicated by a one unit or more change in any HunterLab color scale coordinates of L*, a*, or b*.

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9. (previously presented) The product of claim 1, wherein said ceramic coated articles are white and the product exhibits a HunterLab color scale coordinate L* value of 64 or greater.
10. (original) The product of claim 1, wherein said cured adhesive or said film includes toughening agents, pigments, adhesion promoters, dyes, filling agents, initiators, catalysts, antimicrobials, algacides, ultraviolet stabilizers, ultraviolet absorbers, antioxidants or combinations thereof
11. (original) The product of claim 1, wherein said film includes a primer layer.
12. (original) An integrated granule product suitable as an exposed surface layer for a roofing shingle construction, comprising a plurality of ceramic coated granules bonded to a self-supporting cured adhesive film.
13. (previously presented) The product of claim 12, wherein said cured adhesive is selected from acrylated urethanes, multifunctional acrylate monomers, acrylated epoxies, acrylated polyesters, acrylated polyethers, urethanes, epoxies, acrylics, phenolics, cyanate esters, bismaleimides, hot melts of polyester, polyamides, polyolefins, derivatized polyolefins or combinations thereof
14. (original) The product of claim 12, wherein said product is pliable as determined by mandrel flexibility test procedures according to ASTM D-228-00.
15. (original) The product of claim 12, wherein said cured adhesive is flexible as indicated by a tensile elongation result of 25% or greater according to ASTM D-882.97.
16. (original) The product of claim 12, wherein said cured adhesive film includes toughening agents, pigments, adhesion promoters, dyes, filling agents, initiators, catalysts, ultraviolet stabilizers, ultraviolet absorbers, antioxidants or combinations thereof

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17. (original) An integrated granule product suitable as an exposed surface layer for a floor construction, comprising a plurality of ceramic coated granules bonded to a self-supporting cured adhesive film and a polymeric sealant coat applied over said plurality of ceramic coated granules.
18. (previously presented) The product of claim 17, wherein said cured adhesive is selected from acrylated urethanes, multifunctional acrylate monomers, acrylated epoxies, acrylated polyesters, acrylated polyethers, urethanes, epoxies, acrylics, phenolics, cyanate esters, bismaleimides, hot melts of polyester, polyamides, polyolefins, derivatized polyolefins or combinations thereof.
19. (original) The product of claim 17, wherein said cured adhesive is flexible as indicated by a tensile elongation result of 25% or greater according to ASTM D-882.97.
- 20-25 (canceled)
26. (original) An article comprising, the integrated granule product of claim 1 bonded to a substrate.
27. (original) The article of claim 26, wherein the substrate is an asphalt-based substrate, metal substrate, polymeric substrate, concrete substrate, tile substrate, fiber substrate, wood substrate or combinations thereof.
28. (original) The article of claim 26, wherein the article is a roofing shingle or a roll of roofing material.
29. (original) The article of claim 28, wherein said roofing shingle exhibits a tensile strength, according to American Roofing Manufacturers Association Test Index No. 2,126, of greater than 50% over a shingle without said integrated granule product.
30. (original) The article of claim 26, wherein the article is floor covering.

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31. (original) The article of claim 30, further comprising a polymeric sealant applied over the article.

32-34 (canceled)

35. (previously presented) The product of claim 1, wherein said granules are bonded to said film by a layer of said cured adhesive.

36. (canceled)

37. (previously presented) The article of claim 26, wherein the integrated granule product forms the exposed surface layer of a roofing material.

38. (previously presented) The integrated granule product of claim 1 being suitable as an exposed surface layer for a roofing material.

39. (previously presented) The article of claim 27, wherein the article is a roofing shingle or a roll of roofing material.

40. (new) An article comprising an integrated granule product bonded to an asphalt-based substrate, said integrated granule product comprising a film having a plurality of ceramic coated granules bonded to said film by a cured adhesive.

41. (new) The article of claim 40, wherein the integrated granule product forms the exposed surface layer of a roofing material.

42. (new) The article of claim 40, wherein the article is a roofing shingle or a roll of roofing material.